Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims

CLAIMS

1. (currently amended) A film scanner with an automatic focusing device in which film images are shown line by line by means of an objective on at least one line sensor, wherein with a still film an adjusting range of the objective is passed through according to a predefined program, in that at least one of then developing video signals is evaluated for a high-frequency component and in that the objective is adjusted to the maximum of the high-frequency component, wherein after the adjusting range has been passed through, a smaller range of the objective is passed through, the smaller range includes the previously defined maximum, and in that the objective is adjusted to a further maximum which is determined after the smaller range has been passed through.

2. (currently amended) A film scanner as claimed in claim 1, wherein the film in an image gap between two images is scanned.

3. (previously presented) A film scanner as claimed in claim 1, wherein the film is scanned within an image and that during the evaluation of the at least one of said video signals, the image content is suppressed particularly by autocorrelation.

4. (previously presented) A film scanner as claimed claim 1, wherein when measuring the high-frequency component, differences are formed between the amplitudes of the picture elements neighboring the video signals.

5. (currently amended) A film scanner as claimed in ~~one of the~~ claim 1, wherein when measuring the high-frequency component, the at least one video signals are subjected to a Fast Fourier Transform. ~~(FFT)~~

Claims 6-8 (cancelled)

9. (currently amended) A film scanner as claimed in claim 1, wherein the at least one of said video signals are written in a vertical format buffer ~~(15)~~ and transmitted from there to a digital signal processor ~~(17)~~ which is programmed for determining the maximum.

10. (previously presented) A film scanner as claimed in claim 1 in line with the predefined program, lighting of the film is controlled so that the film is not lighted when the scanning does not need this operation.

11. (currently amended) Method for focusing a film scanner having an objective to project film images on at least one line sensor, the method comprising the steps of

passing through according to a predefined program an adjustment range of the objective with a still film,

evaluating developing video signals then developing for their high frequency component, and

adjusting the objective to the maximum of the high frequency component, wherein by passing through a smaller range of the objective after the adjustment range of the objective has been passed through wherein the smaller range includes the previously defined maximum, and adjusting the objective to a further maximum which is determined after the smaller range has been passed through.

12. (previously presented) Method as claimed in claim 11, wherein the film in an image gap between two images is scanned.

13. (currently amended) Method as ~~defined~~ claimed in claim 11, comprising the additional step of scanning the film within an image and suppressing the image content by autocorrelation during the evaluation of the video signals.

14. (currently amended) Method as ~~defined~~ claimed in claim 11, where the video signals are processed with a Fast Fourier Transformation ~~(FFT)~~ for measuring high frequency components said processed video signals.

Claims 15-16 (cancelled)

17. (currently amended) Method as ~~defined~~ claimed in claim 11, comprising the additional step of:

controlling lighting of the film in line with the predefined program so that the film is not ~~lighted~~ lit when the scanning step does not require a light to scan the film.

18. (new) A film scanner with an automatic focusing device in which film images are shown line by line by means of an objective on at least one line sensor, wherein with a still film an adjusting range of the objective is passed through according to a predefined program, in that at least one of then developing video signals is evaluated for a high-frequency component and in that the objective is adjusted to the maximum of the high-frequency component, wherein when determining the maximum from scanning values of each picture element obtained while the adjusting range is passed through, a respective curve is generated, in that for each curve a maximum is derived and in that an average value of the positions of the maximums is formed while the maximums that lie outside a predefined spread are not taken into account.

19. (new) A film scanner as claimed in claim 18, wherein the film in an image gap between two images is scanned.

20. (new) A film scanner as claimed in claim 18, wherein the film is scanned within an image and that during the evaluation of the at least one of said video signals, the image content is suppressed particularly by autocorrelation.

21. (new) A film scanner as claimed claim 18, wherein when measuring the high-frequency component, differences are formed between the amplitudes of the picture elements neighboring the video signals.

22. (new) A film scanner as claimed in claim 18, wherein when measuring the high-frequency component, the at least one video signals are subjected to a Fast Fourier Transform.

23. (new) A film scanner as claimed in claim 18, wherein when determining the maximums, the respective function is differentiated and a zero is determined.

24. (new) A film scanner as claimed in claim 18, wherein the at least one of said video signals are written in a vertical format buffer and transmitted from there to a digital signal processor which is programmed for determining the maximum.

25. (new) A film scanner as claimed in claim 18 in line with the predefined

program where the lighting of the film is controlled so that the film is not lit when the scanning does not need this operation.

26. (new) Method for focusing a film scanner having an objective to project film images on at least one line sensor, the method comprising the steps of:

passing through according to a predefined program an adjustment range of the objective with a still film,

evaluating developing video signals then developing for their high frequency component,

adjusting the objective to the maximum of the high frequency component

determining the maximum from the scanning values of each picture element obtained while the adjusting range is passed through;

generating a respective curve corresponding to each maximum; and

deriving for each curve corresponding to each maximum as to form an average value of the positions of the maximums while maximums that lie outside a predefined spread are not taken into account.

27. (new) Method as claimed in claim 26, wherein the film in an image gap between two images is scanned.

28. (new) Method as claimed in claim 26, comprising the additional step of scanning the film within an image and suppressing the image content by autocorrelation during the evaluation of the video signals.

29. (new) Method as claimed in claim 26, where the video signals are processed with a Fast Fourier Transformation for measuring high frequency components of said processed video signals.

30. (new) Method as claimed in claim 26, comprising the additional step of:

controlling lighting of the film in line with the predefined program so that the film is not lighted when the scanning step does not require a light to scan the film.